AMENDMENTS TO THE CLAIMS:

This listing of the claims replaces all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (currently amended) A method comprising:

transmitting an initial command from a supervisory device included in a ring of linked devices including the supervisory device and a plurality of port devices, with each device in the ring including an output and an input, with the input of each device in the ring coupled by an upstream link to the output of an upstream device in the ring and with the output of each device in the ring coupled by a downstream link to the input of a downstream device in the ring and with the initial command having a device number field holding an initial value;

receiving the initial command on the upstream link coupled to a port device and, when the command is received, incrementing a value held in the device number field and transmitting the initial command with an incremented value on the downstream link coupled to the port device;

initially outputting link messages on the downstream link coupled to each port device prior to receipt of the initial command, with the link messages holding a link position value equal to a fixed value;

~~subsequently~~ outputting incremented link messages on the downstream link coupled to each port device subsequent to receiving a link message on its upstream link and prior to receipt of the initial command, with the incremented link messages holding a link position value equal to an incremented link position value where the incremented link position value is equal to the link position value received on the upstream link incremented by one;

storing a new link position value received on the upstream link coupled to the supervisory device; and

comparing the new link position value to the number of devices in the ring to determine the location of a bad link in the ring of linked devices if the initial command is not received at the supervisory device before a time period expires.

2. (previously presented) The method of claim 1 further comprising:

reading an external storage device to read a platform value indicating the number of devices in the ring.

3. (Canceled)

4. (currently amended) A system comprising:

means for transmitting an initial command from a supervisory device included in a ring of linked devices including the supervisory device and a plurality of port devices, with each device in the ring including an output and an input, with the input of each device in the ring coupled by an upstream link to the output of an upstream device in the ring and with the output of each device in the ring coupled by a downstream link to the input of a downstream device and with the initial command having a device number field holding an initial value;

means for receiving the initial command on the upstream link coupled to a port device and, when the command is received, incrementing a value held in the device number field and transmitting the initial command with an incremented value on the downstream link coupled to the port device;

means for initially outputting link messages on the downstream link coupled to each port device prior to receipt of the initial command, with the link messages holding a link position value equal to a fixed value;

means for ~~subsequently~~ outputting incremented link messages on the downstream link coupled to each port device subsequent to receiving a link message on its upstream link and prior to receipt of the initial command, with the incremented link messages holding a link position value equal to an incremented link position value where the incremented link position value is equal to the link position value received on the upstream link incremented by one;

means for storing a new link position value received on the upstream link coupled to the supervisory device; and

means for comparing the new link position value to the number of devices in the ring if the initial command is not received at the supervisory device before a time period expires to determine the location of a bad link in the ring of linked devices.

5. (previously presented) The system of claim 4 further comprising:

means for reading a platform value from an external storage device indicating the number of devices in the ring.

6 -7. (canceled)

8. (currently amended) A system comprising:

a supervisory device for use in a ring of linked devices including the supervisory device and a plurality of port devices ~~device~~, with each device in the ring including an output and an input, with the input of each device in the ring adapted to be coupled by an upstream link to the output of an upstream device in the ring and with the output of each device in the ring adapted to be coupled by a downstream link to the input of a downstream device in the ring, with the supervisory device configured to transmit an initial command having a device number field holding an initial value and with the supervisory device configured to store a new link position value received on the upstream link coupled to the supervisory device and configured to compare the new link position value to the number of devices in the ring to determine the location of a bad link in the ring of linked devices if the initial command is not received at the supervisory device before a time period expires;

with each port device configured to initially output link messages on the downstream link coupled to each port device prior to receipt of the initial command, with the link messages holding a link position value equal to a fixed value, and to ~~subsequently~~ output incremented link messages on the downstream link coupled to each port device subsequent to receiving a link message on its upstream link and prior to receipt of the initial command, with the incremented link messages holding a link position value equal to an incremented link position value, where the incremented link position value is equal to the link position value received on the upstream link incremented by one.

9-12. (canceled)